

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the Claims:**

Claim 1 (currently amended): A method for analyzing a circuit design comprising:

reading violations of a specification for a circuit design;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database.

Claim 2 (original): The method of claim 1, further comprising:

running an E-CAD tool on the circuit design; and

detecting violations of the specification using the E-CAD tool.

Claim 3 (original): The method of claim 2, further comprising storing the violations to a violations file, and wherein the step of reading violations comprises reading the violations file.

Claim 4 (original): The method of claims 2, further comprising configuring the E-CAD tool to the circuit design using a configuration file.

Claim 5 (original): The method of claim 1, further comprising:

receiving a selected solution;

re-configuring an E-CAD tool based on the selected solution; and

re-running the E-CAD tool on the circuit design.

Claim 6 (original): The method of claim 5, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and

wherein the step of receiving the selected solution comprises receiving an input signal from an input device.

Claim 7 (original): The method of claim 5, wherein the step of re-configuring comprises editing a configuration file of the E-CAD tool.

Claim 8 (original): The method of claim 1, further comprising storing data related to symptoms and solutions for the circuit configuration in the solutions database.

Claim 9 (original): The method of claim 1, wherein the steps of reading violations, identifying symptoms, identifying solutions, and proposing the proposed solution comprise using a software configuration tool stored in a computer memory.

Claim 10 (currently amended): A computer system for analyzing signals in a circuit design stored in a memory, the system comprising:

a storage medium; and

a processor for executing a software program stored on the storage medium for analyzing a circuit design, the software comprising a set of instructions for:

reading violations of a specification for a circuit design;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database.

Claim 11 (original): The system of claim 10, further comprising instructions for:

configuring an E-CAD tool to the circuit design using a configuration file;

running the E-CAD tool on the circuit design;

detecting violations of the specification using the E-CAD tool; and

storing the violations to a violations file; and

wherein the step of reading violations comprises reading the violations file.

Claim 12 (original): The system of claim 11, further comprising instructions for:  
receiving a selected solution;  
re-configuring the E-CAD tool based on the selected solution; and  
re-running the E-CAD tool on the circuit design.

Claim 13 (original): The system of claim 10, further comprising instructions for:  
receiving a selected solution; and  
editing a configuration file of an E-CAD tool based on the selected solution.

Claim 14 (original): The system of claim 13, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and wherein the step of receiving a selected solution comprises receiving an input signal from an input device.

Claim 15 (currently amended): A computer-readable medium having computer-executable instructions for performing a method for analyzing a computer representation of a circuit design, the method comprising:  
reading violations of a specification for a circuit design;  
identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;  
identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and  
proposing a proposed solution based on data stored in the solutions database.

Claim 16 (original): The medium of claim 15, the method further comprising:  
configuring an E-CAD tool to the circuit design using a configuration file;  
running the E-CAD tool on the circuit design;  
detecting violations of the specification using the E-CAD tool; and  
storing the violations to a violations file; and

wherein the step of reading violations comprises reading the violations file.

Claim 17 (original): The medium of claim 16, the method further comprising:

receiving a selected solution;

re-configuring the E-CAD tool based on the selected solution; and

re-running the E-CAD tool on the circuit design.

Claim 18 (original): The medium of claim 15, the method further comprising:

receiving a selected solution; and

editing a configuration file of an E-CAD tool based on the selected solution.

Claim 19 (original): The medium of claim 18, wherein the step of proposing the proposed

solution comprises displaying at least one proposed solution on a display device, and

wherein the step of receiving a selected solution comprises receiving an input signal from an input device.

Claim 20 (original): The medium of claim 18, the method further comprising re-running the E-CAD tool on the circuit design.